

Food security and international trade

Unpacking disputed narratives

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The State of Agricultural Commodity Markets 2015-16

Background paper

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Background paper prepared for *The State of Agricultural Commodity Markets 2015–16*.

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Executive summary

Is trade a threat or an opportunity for food security? Longstanding debates over this question remain unresolved. This is understandable when one considers that the agricultural sector serves a range of vital functions in society. It provides food, which is essential for human survival, and it provides a livelihood for approximately 30 percent of the world's active workforce. At the same time, agricultural exports are a significant source of revenue for some states, and imports are crucial for food security in other states. Agriculture also has deep ecological connections as well as important cultural dimensions. For these various reasons, there has long been concern about the ways in which international trade might improve or hinder society's ability to balance different social and economic goals as they relate to agriculture and food security.

This paper seeks to shed light on this debate by providing an overview of the main opposing narratives and the rationale behind them. It does not seek to advocate one viewpoint over the other. Instead, it seeks to examine the contours of the debate with a view to uncovering why it is so polarized, and how we might move beyond the current impasse in international policymaking.

The first section of the paper briefly maps out the historical context of the different understandings of the links between food security and trade. It shows that norms and ideas around the concepts of both food security and trade in agriculture have shifted over time, both independently and in relation to each other.

The second and third sections of the paper explain the conceptual basis of two distinct narratives: one that sees trade as an opportunity to enhance food security; and another that sees trade as a threat to food security. These sections examine the arguments put forward in support of these viewpoints and discuss some of the potential limitations and inconsistencies of each approach. Each of these narratives emerges from different scholarly traditions grounded in their own notions of science. The trade as opportunity narrative emerges largely from the discipline of neoclassical economics and relies on the ideas of gains from trade as predicted by trade theory, the practicality of trade in a diverse world, as well as the perceived costs of trade protection. The trade as threat narrative emerges from a range of social science disciplines as well as agroecological science and draws on ideas of the sovereignty of states and communities to determine their own food policy, the multifunctional nature of agriculture in society, and the perceived costs associated with trade liberalization. Each of these approaches raises valid arguments, but each also has weaknesses and inconsistencies.

The final section of the paper considers some of the factors that help to explain why this debate has been so polarized in policy settings, and suggests some possible avenues for advancing the policy dialogue. These include asking more open-ended questions, the development of joint language and indicators, and strengthening areas of convergence in institutions of global governance through more collaborative processes. The paper concludes that an assessment of the interplay between food security and international trade benefits from evaluation that draws on multiple disciplinary and methodological perspectives, and it is through such an exercise that common ground in the debate is most likely to be found.

"As so often in economic debates between two alternatives, history provides the answer which economists abhor, both."

Charles Kindleberger, 1975

1. Introduction

What is the appropriate role for trade in meeting food security objectives? This question has been debated for centuries. From the highly charged debates over Britain's Corn Laws in the 1800s, to more recent political wrangling over agriculture in the World Trade Organization (WTO), the international trade in food and agricultural products has been a particularly sensitive topic. The frequently heated nature of this deliberation is understandable when one considers that the agricultural sector serves a range of vital functions in society. It provides food, which is essential for human survival, and it provides a livelihood for approximately 30 percent of the world's active workforce, with a much higher proportion engaged in the sector in many developing countries (World Bank, 2014a). At the same time, agricultural exports are a significant source of revenue for some states, and imports are crucial for food security in other states that do not have an agricultural base that can support their population. Agriculture also has deep ecological connections as well as important cultural dimensions within countries. For these various reasons, there has long been concern about the ways in which international trade might improve or hinder society's ability to balance different social and economic goals as they relate to agriculture and food security.

The relationship between food security and international trade is highly complex and policy directions are not always straightforward or unified across countries. There are many factors to consider. For example, trade barriers can restrict food availability in regions experiencing food deficits, leading to higher prices and reduced access to food. High levels of subsidy support to agriculture in some countries can put downward pressure on world prices and reduce incomes for other agricultural exporters. Lower food prices that result from subsidy support may benefit urban consumers in importing countries at the same time they may hurt farmers' incomes in those same countries. But extreme reliance on imported food can bring vulnerability to external shocks, such as price spikes that can overwhelm a country's import bills in a short period of time. Over-reliance on agricultural exports as a primary source of foreign exchange also has its risks, including the possibilities of prolonged price declines, or conversely, highly volatile prices, both of which impact the food security of producers. How governments navigate these concerns via trade policy depends on their own unique situation.

Food security has become an especially prominent issue in the trade policy context in recent years, particularly since the food price spikes of 2007–08 when many countries used trade measures to insulate themselves from higher world food prices. The use of trade measures for food security aims was a key flashpoint at the December 2013 WTO ministerial meeting in Bali and throughout 2014. India and other developing countries pressed for clarity in the rules of the Agreement on Agriculture (AoA) that would secure developing countries' ability to pursue domestic policies for food security – such as public stockholding schemes designed to address hunger and food insecurity – without fear of being in contravention of international trade rules. This recent flare-up over trade and food security was only the latest tense moment over the issue at the WTO. Indeed, the Doha Round negotiations have been ongoing since 2001, and are widely seen to have been repeatedly stalled over differences in the rules on agriculture and their implications for food security (Díaz-Bonilla, 2014).

Beyond the WTO, tensions over the appropriate role for trade in food security policy have also been front and centre in a number of other policy contexts in the past decade. Trade featured as a key factor, albeit in different ways, in two key reports on agriculture and development in 2008 – the World Bank's *World Development Report 2008*, and the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report (World Bank, 2007; IAASTD, 2009). Trade was also a divisive issue in the 2007–08 food crisis, as widespread export restrictions in a number of countries were seen by some to have contributed to price spikes (Sharma, 2011; Headey, 2011). Concern over agricultural market volatility in the wake of the food crisis also prompted efforts of the G20 to address food security through initiatives such as the Agricultural Market Information System (Clapp and Murphy, 2013). More recently, the impact of trade policies on prices and access to food is mentioned in the draft Sustainable Development Goals (SDGs) on hunger and food security (Open Working Group on SDGs, 2014).

In these various policy settings, different actors have put forward divergent interpretations of the relationship between food security and international trade. Those advocating agricultural trade liberalization, including the World Bank, the WTO, the Organisation for Economic Co-operation and Development (OECD), and a number of industrialized countries, see trade as an opportunity to enhance food security. Those sceptical of trade liberalization, including some groups of developing country governments, the food sovereignty social movement, and a number of civil society organizations, tend to see trade as a threat to food security. Both supporters and sceptics of trade liberalization base their arguments on particular ideas and understandings about food security, agricultural trade, and their relationship to one another, which they explain through distinct narratives that outline their reasoning. These narratives, however, sit in opposition to each other on many points. The result has been deadlocked policy processes around the appropriate role for trade in food security.

This paper seeks to shed light on this debate by providing an overview of these opposing narratives. It does not seek to advocate one viewpoint over the other. Instead, it seeks to examine the contours of the debate with a view to uncovering why it is so polarized, and how we might get past the current impasse in international policymaking. The first section of the paper briefly maps out the historical context of the different understandings of the links between food security and trade to show how norms of food security and trade in agriculture have shifted over time, both independently and in relation to each other. The second and third sections explain the conceptual basis of each of the two narratives, and discuss some of the potential limitations and inconsistencies of each approach. The paper then considers some of the factors that help to explain why this debate has been so polarized in policy settings, and suggests some possible avenues for advancing a more productive policy dialogue.

Analysis of this debate reveals that the relationship between trade and food security goes well beyond economic considerations. It includes political, social, and ecological dimensions that must also be taken into account. As such, assessment of the interplay between food security and international trade benefits from evaluation that draws on multiple disciplinary and methodological perspectives, and it is through such an exercise that common ground in the debate is most likely to be found.

2. Shifting understandings: food security and trade in historical context

Contemporary narratives on trade and food security draw on particular normative understandings of both food security and the appropriate role of trade in food and agriculture. Norms in global political and economic settings are understood to be standards of behaviour that are themselves shaped by the

identities and preferences of key actors and are reflected in policies and institutions (Finnemore and Sikkink, 1998). Norms regarding both food security and food trade have evolved over time as ideas shifted and were shaped by experience, new information, interests, and institutional frameworks. Food security as a concept has expanded from an initial focus on food supply at the level of the nation state, to also include global and individual conceptualizations that incorporate dimensions beyond simply the supply of food. Norms around trade in food items have also evolved, with food at times being treated as exceptional in trade policy, and at times motivating calls for agricultural trade liberalization. Examining these shifts helps to give historical context to the multiple perspectives on these terms that today remain deeply contested.

2.1 Food security: from national to international to individual conceptualizations

Early notions of "food security" were intimately connected to the nation-state and to broader notions of national security, as states have long sought to ensure access to food for their populations. These early ideas about food security focused primarily on ensuring sufficient national production and supply of food in order to be prepared for invasion, war, and emergencies, as well as to ensure domestic social and political stability. In this way, support for agriculture and food provisioning have historically been a key component of nation building (Friedmann and McMichael, 1989). Threat of large-scale military invasion has diminished for many, but not all, countries, and in this context, a growing number of countries have increased their reliance on global markets to source food. As a result, the notion of food security has expanded beyond a focus on the nation-state's supply of food. At the same time, however, the idea has persisted that domestic food production is vital for state security.

The idea of an international, or world-level, food security norm — as distinct from a national concern about food security — only emerged in the twentieth century. After World War I, the League of Nations saw the need for multilateral mechanisms to address problems with food production, supply, and trade, including assistance to developing countries (Shaw, 2007, p.5; Simon, 2012). In 1941, Franklin D. Roosevelt's influential "four freedoms" speech stressed the importance of "freedom from want" as a key tenet of international policy. This call was taken up in the global arena around food with the establishment of the FAO in 1945, which explicitly states in the preamble to its constitution that one of its main aims is "ensuring humanity's freedom from hunger" by promoting greater and more efficient production and distribution of food, raising levels of nutrition, and bettering the condition of rural populations (FAO, 2013).

The early norms reflecting an international concern for ending hunger focused very much on food production and supply. The emphasis on supply was an important rationale (albeit one of several) for the launch of food aid programmes in many industrialized countries in the 1950s, and for the establishment of the UN World Food Programme in 1961 (Clapp, 2012). These programmes enabled the movement of excess food supply from the industrialized countries that were producing enormous surpluses of grain that emerged due to a combination of state support for agriculture and the adoption of modern farming techniques (Friedmann, 1982). During the Cold War, food aid was a major source of international assistance, as hunger in the developing world was widely seen to be a potential contributor to political instability in geopolitically important regions that could spill into the international arena (McDonald, 2010). Over time, the scale of surplus disposal by donors contributed to growing dependence on foreign sources of food, which eventually came to be seen by the United States of America – by far the largest donor of food aid – as a political problem in and of itself. By the mid-1960s, for example, the United States of America urged India and other developing countries to adopt Green Revolution farming techniques in order to improve their own agricultural productivity and gain a

greater measure of self-sufficiency that would enable them to reduce their dependence on food aid (Ahlberg, 2007). Greater self-sufficiency in the developing world came to be viewed as an important factor in building political stability not just in developing countries, but also globally (Cullather, 2010).

The term "food security" was first introduced in the mid-1970s in the midst of a global food crisis that saw rapidly rising grain prices and heightened concern about the scale of world hunger (Shaw, 2007). In line with Cold War concerns about the connection between hunger and political stability in developing countries, food security at that time was defined primarily in terms of food supply at the international level (Maxwell 1996). The UN World Food Conference, held in 1974 at the height of food market turmoil, first defined food security as: "availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices" (FAO, 2003).

Understandings of food security shifted throughout the 1980s and 1990s, moving beyond a singular focus on food supply at the global or national level. These shifts occurred as Cold War tensions eased and as global market integration accelerated. Amartya Sen's path-breaking work on the causes of famine shed new light on the complex nature of hunger (Sen, 1981). Sen's work showed that hunger was deeply linked to individual food access, rather than simply its availability in society. People's access, in turn, depended on their ability to obtain resources to produce, buy, or trade for food. In other words, having enough food available in a society was no guarantee that everyone would be free from hunger. Poverty and an individual's position in society played an important role in determining whether he or she could gain access to food. This important insight was captured in the World Bank's 1986 report, *Poverty and Hunger*, which defined food security as "access of all people at all times to enough food for an active, healthy life" (World Bank, 1986, p.1). The report stressed that self-sufficiency was not a prerequisite for food security, illustrating the shift away from the food supply focus of food security, although the report did acknowledge that food self-sufficiency may be an attractive goal for other reasons (World Bank, 1986, p.49).

Definitions and understandings of international food security were further refined in the following decades (see Box 1). The 1996 World Food Summit expanded the definition to incorporate nutrition and cultural dimensions, and with the addition of the word "social" in 2001, this definition remains the most widely used and authoritative definition of the concept today: "food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2001). This definition featured three important pillars – availability, access and utilization – which had consistently been highlighted in the academic literature to that point (Webb *et al.*, 2006; Barrett, 2010). In 2006, the FAO added a fourth pillar – stability – to capture the idea of constancy of the three other pillars over time (FAO, 2006).

From the mid-1990s, the concepts of food sovereignty and the right to food also gained increasing attention from scholars concerned with issues of hunger, and have been influential in shaping global food security norms and ideas. Food sovereignty emerged as a concept in the early-mid 1990s and has been associated with a broad social movement that challenges what it perceives as a food system controlled by transnational corporations and industrial country interests and advocates the rights of states and communities to shape their own food systems. For this social movement, food sovereignty is a prerequisite to genuine food security (see Patel, 2009; Jarosz, 2011). The definition of the concept was clarified at a gathering of the movement in Nyéléni, Senegal, in 2007, stressing that "Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and

sustainable methods, and their right to define their own food and agriculture systems" (Forum for Food Sovereignty, 2007).

Right to food advocates approach food security within a human rights framework. The right to food has legal origins in the 1948 Universal Declaration of Human Rights, as well as subsequent declarations and agreements. In 1996, the FAO World Food Summit not only provided the definition of food security most widely used today, but also adopted the Rome Declaration on World Food Security, which reaffirms the right to food. In 2000, the UN established a mandate for a Special Rapporteur on the Right to Food, and in 2004 the FAO adopted the Right to Food Guidelines (FAO, 2004). The activities of the Special Rapporteurs on the Right to Food have raised the profile of this legal concept, particularly following the 2007–08 food price spikes (De Schutter, 2008; De Schutter and Cordes, 2011).

For much of the twentieth century, understandings of malnutrition focused on undernutrition and specifically the lack of sufficient caloric intake. In recent decades there has been growing attention to what is termed the "triple burden of malnutrition", which refers not only to chronic undernourishment, but also to micronutrient deficiencies (also referred to as "hidden hunger"), as well as overnourishment characterized by rising rates of obesity and overweight. All three of these forms of malnutrition are important, and can afflict societies simultaneously. Greater awareness of the complexity of malnutrition has in turn informed conceptualizations of food security, which increasingly include reference to the over and under-consumption of calories as well as the public health implications of micronutrient deficiencies (Gómez *et al.*, 2013; Hawkes *et al.*, 2012; Friel *et al.*, 2015).

As this discussion shows, there have been shifts in understandings of food security over the past century. Analysis has expanded to consider both global and individual levels, as well as multiple dimensions of hunger and malnutrition. But these newer ideas did not completely supplant older ideas about food security that were rooted in production and self-sufficiency at the national level. As will be discussed below, each of these various ideas continue to influence food policy today in important ways and in turn are relevant in the context of food security and trade linkages.

Box 1: Shifting food security norms in the past century

Nineteenth to early twentieth centuries: focus on food self-sufficiency as part of national security of states.

Mid-twentieth century: increasing attention to global implications of hunger

- League of Nations work on nutrition (1930s).
- "Freedom from want" (Franklin D. Roosevelt, 1941).
- Establishment of FAO (1945).
- Universal Declaration of Human Rights incorporates right to food (1948).
- Establishment of food aid programmes (1950s–60s).

1970s: the term "food security" is first introduced and has a global outlook.

 World Food Conference (1974) defines food security: "Availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices."

1980s: focus of food security shifts from production to also incorporate access, and to include individuals.

- FAO definition (1983): "Ensuring that all people at all times have both physical and economic access to the basic food that they need."
- World Bank definition (1986): "Access of all people at all times to enough food for an active and healthy life."

1990s: growing attention to nutrition and cultural dimensions of food security, and the emergence of the concept of food sovereignty.

- World Food Summit (1996) definition: "Food security, at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preference for an active and healthy life."
- Emergence of the concept of food sovereignty (1996), defined most broadly as the right of nations and peoples to determine their own food systems.

2000s: Consolidation of the four pillars of food security and growing attention to the right to food, food sovereignty, and new dimensions of nutrition.

- The word "social" is added to the FAO definition of food security (2001): "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."
- Adoption by the FAO of the Right to Food Guidelines (2004).
- Four pillars of food security are outlined by the FAO (2006) to supplement and clarify the 2001 definition: availability, access, utilization, and stability.
- Nyéléni Declaration on Food Sovereignty (2007) gives prominence to the concept.
- Growing attention to the "triple burden" of malnutrition.

Sources: FAO, 2004; FAO, 2006; Clay, 2002; McDonald, 2010; Carolan, 2013; Shaw, 2007; Simon, 2012.

2.2 Trade norms: food exceptionalism and trade liberalization

Like food security norms, understandings and norms about the role of trade in food and agriculture have also shifted over time, as shown in Figure 1. The international trade in food items is nothing new, nor is debate about its merits and downsides. The imposition of the Corn Laws in Britain in 1815, for example, sought to protect domestic farmers by imposing steep duties on imported grain. The rationale for these measures was to encourage self-sufficiency in food on national security grounds (Schoenhardt-Bailey, 2006). But the idea that countries should strive for self-sufficiency came under pressure in the mid-1800s in the context of objections from industrial interests and rising concern about access to food for Britain's poorer classes (O'Rourke and Williamson, 1999; Irwin, 1989). The Corn Laws were repealed in 1846 and this episode is widely seen to have ushered in an era of "free trade", as many countries around the world followed Britain's lead in reducing agricultural trade barriers. This "golden era of free trade" for food and agriculture only lasted a few decades, however, and countries were soon back to protecting the agriculture sector by the 1880s and throughout most of the twentieth century (McCalla, 1969).

In the past 70 years, debates over trade in food and agriculture have taken place largely in the context of the international trade regime, initially under the General Agreement on Tariffs and Trade (GATT) and more recently under the WTO. In the early years of this regime, food and agriculture were treated as exceptional cases. From the inception of the GATT in 1947, which sought to bring "freer trade" by dismantling trade barriers, food was exempted from the wider norm of trade liberalization (McCalla, 1993). This was in part due to the fact that many governments assumed that agricultural markets were likely to fail to provide what were considered public goods (including food security and its role in national security, discussed above) because those markets were prone to price instability and concentration. In this context, many governments saw it as their legitimate role to address those market failures (Moon, 2010, p. 36). Some analysts explain ongoing trade protection in the sector as a result of political lobbying by interest groups that benefit from market interventions (McCalla. 1993; Josling *et al.*, 2010).

This "food exceptionalism" in the trade regime was strongly supported by the US, which wished to maintain its complex system of agricultural supports and trade restrictions for its own political reasons. With the world's most powerful economy insisting on exceptionalism for food and agriculture, other countries followed suit with their own systems of agricultural sector support and restrictions on trade (Aksoy, 2005). Agricultural exceptionalism, for example, became a strong norm in the European Community with the adoption of the Common Agricultural Policy in 1958, which sought to support the sector through subsidies and other programmes (Skogstad, 1998).

Although food was made an exceptional case in the GATT regime due to the sensitive nature of agriculture in national policy, its exemption from trade rules became increasingly expensive to maintain for those countries imposing restrictions and granting subsidy support. These policies also had negative impacts on other countries. Surplus production, spurred by subsidy support and other forms of trade protection, led to widespread agricultural dumping, including through food aid, which was used as a surplus disposal mechanism and distorted international food markets (Friedmann, 1982). These practices were problematic for many developing countries, as subsidized food exports and food aid from industrialized countries often undercut their own production (Clapp, 2012). They were also problematic for those agricultural exporting countries that were not able to provide the same level of subsidy support, as cheaper, subsidized food products available on international markets out-competed other exports.

Starting in the 1980s, with the rise of neo-liberal economic policies, there was growing pressure to liberalize agricultural trade within the international trade regime. There had been some earlier attempts to incorporate agriculture into the GATT rules in previous decades, but these efforts were not successful (McCalla, 1993). The Uruguay Round, launched in 1986 and completed in 1994, included an Agreement on Agriculture that incorporated rules to begin the process of liberalizing agricultural trade. Although the AoA secured liberalization in some aspects of agricultural trade, including tariff reductions on agricultural products, it did not fully shift the trade regime away from the norm of food exceptionalism to that of trade liberalization. The AoA allowed numerous subsidy programmes to continue in industrialized countries (legitimized on the grounds of exceptionalism, but defined in a way so as to be considered non-trade distorting). At the same time, many developing countries were obliged to open their markets to imports even though they could not afford subsidy programmes of the type that industrialized countries had developed (Pritchard, 2009; Bukovansky, 2010; Khor, 2010).

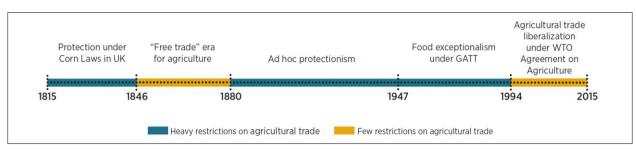


Figure 1: Dominant agricultural trade norms, 1815-2015

Source: author

The uneven process of agricultural trade liberalization at the WTO has caused much friction in recent years, and both trade liberalization and trade exceptionalism norms have been prominent in these debates. The Doha Round of trade negotiations, launched in 2001, initially sought to rectify the imbalance of the Uruguay Round AoA by correcting for the inequities that were built into the original agreement. An explicit aim was to strike a balance between competing agricultural trade norms by incorporating the notion of special and differential treatment for developing countries and by stressing the importance of "non-trade concerns," including food security (Sakuyama, 2005; Clapp, 2015). The Doha talks have only moved forward in fits and starts, however, stalling frequently as industrialized and developing countries have repeatedly clashed over these issues, and prospects for a successful reconciliation of these various norms remain unclear.

Debates over the appropriate role for trade in food security policy have taken place outside of the WTO in this period as well. As noted above, the food sovereignty movement emerged in the mid-1990s in direct response to what was seen as the problematic impact of trade liberalization in the sector resulting from the Uruguay Round (Lee, 2013). This social movement, which has gained popularity in recent years among a growing number of peasant organizations such as La Via Campesina, advocacy NGOs, and academics, has sought to re-legitimize the norm of food exceptionalism at the level of the state, as well as at the community level, by stressing a policy of reduced reliance on international food trade in favour of local food systems (Desmarais, 2007; Wittman *et al.*, 2010).

With widely divergent ideas about the meaning and dimensions of food security, as well as major shifts in norms regarding whether food should be treated as an exceptional case in international trade rules, it is not surprising that debates over the implications of trade for food security have been so heated, and

so complex, over the years. The following section takes a deeper look into the arguments supporting the divergent narratives that are prominent in these debates today.

3. Trade as an opportunity for food security

Turmoil on global food markets since 2007 has prompted greater use of trade-relevant policy measures, such as export bans, price controls, and public-stockholding schemes by a number of countries as a means to enhance domestic food security. Many countries in Asia, Africa, and the Gulf region also announced plans to become more self-sufficient in food in order to reduce their reliance on global markets for their food supply. Trade advocates have actively argued against these types of policies, which they see as harming, rather than enhancing, food security. Instead, they argue that more trade, supported by more open trade policies, is required to enhance food security.

Those who view trade as beneficial for food security typically draw on economic ideas and promote the idea of "food self-reliance" – i.e. engaging in trade as a means by which to ensure food security (FAO, 2003). This concept of food self reliance is often contrasted with food self-sufficiency, which is understood by trade advocates as a country that completely closes its borders to food trade. Advocates of this approach generally prefer to work with more recent understandings of food security and tend to downplay older conceptualizations that focus on national food production and self-sufficiency, which they see as being outdated and unworkable in a modern context. They also critique the norm of food exceptionalism in trade rules as being highly inefficient and damaging for food security. Those taking this viewpoint do not necessarily call for completely "free trade" in food and agriculture. Rather, they support the idea of trade liberalization to reduce distortions in the sector. Their argument is that fewer distortions will enhance efficiencies and result in net benefits for those countries that liberalize, which in turn will have a positive impact on food security.

Three lines of argumentation are common to this narrative: 1) reference to the classical trade theory of comparative advantage to make the case that efficiency gains from trade will increase food supplies both globally and nationally and contribute to higher incomes, resulting in improved availability of and access to food; 2) reference to trade as a "transmission belt" that helps to smooth out food deficits and surpluses across different countries; and 3) reference to the ways in which trade restrictions negatively impact food security. These arguments are explained more fully below.

3.1 Comparative advantage

Most economists today generally support freer trade over protection, including trade in food and agriculture. The concept of comparative advantage, drawn from the classical trade theory outlined by David Ricardo in 1817, is often given as a rationale for this view. According to the theory, there will be gains from trade even if a country does not have an absolute advantage in any particular good. The key is that all countries are comparatively better at producing some goods than they are at producing other goods, and that these comparative advantages at the domestic level are what matters for realizing gains from trade (see Schumacher, 2013; Prasch, 1996).

The theory posits that because each country faces different opportunity costs to produce different goods – due to variations in endowments of land, labour, climate, capital, and technology – every country has comparative advantage in at least some goods. If all countries specialize in the goods for which they have comparative advantage and then engage in trade with other countries that are doing

the same, according to the theory, world welfare should increase. Specialization in this way spurs efficiency gains that should lead to a rise in overall world production of goods. These predicted gains can be demonstrated mathematically, and it is widely assumed by those adopting this narrative that countries that trade do so because they are made better off than is the case without trade. The theory has been updated and refined by others since it was first articulated to account for the modern context, and has remained a dominant rationale for trade liberalization.

The theory of comparative advantage is often referenced by those who argue that trade liberalization enhances food security (Lamy, 2013; FAO, 2003; World Bank, 2007; World Bank, 2012; Zorya *et al.*, 2015). The idea is that efficiency gains from specialization and trade should improve both food availability and food access. Common steps to the argument (illustrated in Figure 2) are as follows:

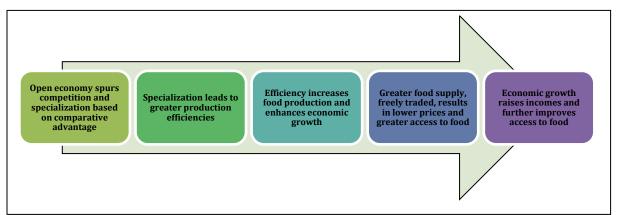
- Removal of trade barriers encourages market competition and specialization based on comparative advantage (as determined by natural endowments with respect to land, labour, technology, and climate, etc.).
- Efficiency of food production is enhanced as crops are grown in countries that have the least opportunity costs in producing them.
- More efficient agricultural production results in greater food supply on a global scale (from
 efficiency gains), as well as higher economic growth and job creation (spurred by efficiency gains in
 sectors with a comparative advantage) within countries, enabling technological development to
 further enhance production.
- A greater supply of food, freely traded, should result in more availability and lower food prices in all
 countries, as dictated by the forces of supply and demand, resulting in greater access to a wider
 variety of food, improving food security.
- Economic growth resulting from more efficient economic activity raises incomes and creates jobs, also improving access to food and enhancing food security.

Illustrating the steps to this argument, Pascal Lamy, former head of the WTO, noted after the recent food crisis: "Clearly, international trade was not the source of the food crises. If anything, international trade has reduced the price of food over the years through greater competition, and enhanced consumer purchasing power. International trade has also brought about undisputable efficiency gains in agricultural production" (Lamy, 2011).

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¹ Although two country models of comparative advantage are not always the most appropriate means by which to analyze the impact of trade liberalization in developing countries, these more basic iterations of the idea have wide appeal and are often referenced in policy documents.

Figure 2: Pro-trade perspective on comparative advantage, trade, and food security



Source: based on FAO, 2003; Lamy, 2013.

3.2 Trade as a transmission belt

A second common argument for why trade liberalization enhances food security is that it acts as a transmission belt, moving food from surplus to deficit regions. This argument builds on the theory of comparative advantage but emphasizes the balancing role that trade can play in distributing food more evenly on a global scale (Lamy, 2012; OECD, 2013). There are three commonly cited reasons why food trade is justified on these grounds. First, some countries simply lack the natural endowments to produce enough food – either total calories or sufficient dietary diversity – because they are limited by land, climate, soil, or other factors. Other countries, by contrast, are naturally well endowed to produce more food than they require in terms of both quantity and quality. Trade advocates stress that open trade policies enable the free movement of food from countries with structural surpluses to countries with structural deficits, enhancing world food security (World Bank, 2012).

Second, those from a pro-trade perspective stress that the movement of food from surplus to deficit areas is also required due to annual variability in weather and other conditions. Agricultural output on a global scale is more stable from year-to-year than agricultural production at the national or regional level, and trade serves as an important vehicle for redistributing food due to these fluctuations in production. The movement of food from surplus to deficit regions also helps to stabilize food prices, which is another benefit to food security (World Bank, 2012; OECD, 2013, p.80).

Third, because complete self-sufficiency is not practical in many cases for environmental and resource availability reasons, there can be sustainability benefits to food trade. Many studies have indicated that climate change is likely to have a negative impact on agricultural production in a number of countries, with some of the starkest effects expected in sub-Saharan Africa (Porter *et al.*, 2014). For this reason, trade is seen by its advocates to be important as a means by which to promote more sustainable agricultural production on a global scale by specializing production in areas where crops can be grown without the need for excessive land clearing or irrigation. In other words, it is imperative that food be produced in locations where it is most efficient to do so not just in monetary terms, but also in terms of natural resource availability (Lamy, 2013; OECD, 2013, p.80).

3.3 Agricultural protection imposes costs that harm food security

A third common argument in the "trade as opportunity" narrative focuses on the perceived economic costs associated with agricultural protection policies that in turn can have a negative impact on food security. The World Bank, for example, consistently points out the potential gains from trade liberalization in the agricultural sector, in particular for developing countries (World Bank, 2007; World Bank, 2012; see also Anderson and Martin, 2005). By the same token, agricultural protection measures such as quantitative restrictions and tariffs are often criticized by agencies such as the World Bank and the WTO as being highly inefficient policies that can result in higher food prices (World Bank, 2012; Anderson, 2013). Tariffs, for example, can increase prices of food imports in food deficit countries, leaving imported food items out of reach of poor people.

Agricultural protection also harms food security in other ways, according to this narrative. Taxes and other restrictions on food exports, state marketing boards that administer fixed crop prices, and other forms of market intervention can reduce incentives and market opportunities for farmers in developing countries. Trade advocates warn that farmers' incomes can be harmed by such policies, in turn compromising their ability to access sufficient food (World Bank, 2007; Lamy, 2013, p.77).

The implementation of export bans and other export restrictions can also trigger price spikes that have direct food security implications for poor people, many of whom spend 50–80 percent of their income on food. Export restrictions may help to keep prices of certain food crops low within a country that normally exports that crop, but can drive up prices for other countries that rely on imports of that crop (OECD, 2013). This risk is especially high for certain agricultural commodities, such as rice, that have "thin" markets (dominated by only a few suppliers) (Headey and Fan, 2008). Trade liberalization, advocates argue, helps to reduce thin markets by increasing competition among suppliers which helps to dampen price volatility, ultimately benefiting food security (Headey, 2011).

3.4 Potential limitations and inconsistencies in the "trade as opportunity" narrative

The arguments in favour of the case that liberalized agricultural trade is an opportunity to enhance food security have wide appeal among economists because they follow economic logic and lend themselves to measurement and modelling. The economic arguments that underpin this perspective, however, rest on certain assumptions about the nature of the global economy, and if those assumptions are not valid or do not hold, the predictive value of trade theory is open to question. For example, the assumptions that underpin the theory of comparative advantage include the immobility of capital and labour between countries, perfect competition in markets for goods, perfect mobility of capital and labour between activities within a country, the absence of externalities, and that all partners benefit from trade (McCalla, 1969; Schumacher, 2013).

Although trade theory has been updated and refined to take some of the complexities of the current global economy into account, such as exchange rates as adjustment mechanisms, the failure of many of these assumptions to hold in today's global economy have important implications for food security. These implications are not necessarily uniform across countries, as there is a wide variety of specificity in each case. Smaller developing countries tend to be price takers in global markets and as such are not major players in terms of shifting the allocation of global production, although for this same reason they are deeply impacted by changes in world prices. Additionally, the economic arguments typical to this narrative also focus almost exclusively on efficiency gains, assuming that such gains can be directed towards supporting other social goals. But if the pursuit of efficiency gains undermines other social goals

directly, the focus on efficiency must be questioned as a first best strategy. Some of the potential limitations of this viewpoint are examined below with specific reference to their food security claims.

Global value chains change the equation

Today's globalized food system is organized around large global-scale agrifood value chains that are deeply complex and dominated by a handful of powerful corporations that are truly transnational in scope (Murphy, 2008; UNCTAD, 2009). In these conditions, the assumptions behind trade theory are unlikely to hold for the food and agriculture sector, raising questions about the validity of the predicted food security gains. The assumption of immobility of capital is vital for the theory, for example, because if firms are able to invest abroad, the concept of comparative advantage is undermined (Schumacher, 2013). Transnational agribusiness companies that dominate global value chains in the food sector are highly mobile and able to invest in developing countries to capitalize on absolute advantages that may exist in those locations, rendering comparative advantage largely irrelevant. Moreover, profits generated within global value chains tend to accrue to the transnational corporations (TNCs) that dominate the chain (as illustrated in Figure 3), rather than to farmers within the country in which production takes place (UNCTAD, 2009; McMichael, 2013).

The organization of the modern food system into complex global value chains also raises questions about the assumption of competitive markets that underlies the theory. Without competitive markets, efficiency gains from trade liberalization are uncertain. Yet in the agricultural sector, there is a high degree of concentration among firms both within countries, as well as internationally, which points to a lack of open competition in general (ETC Group, 2009; Clapp and Fuchs, 2009). Economists typically consider situations where the top four firms in a sector control more than 40 percent of the market to be uncompetitive, or inefficient. In the agricultural sector, the top four firms frequently control more than 40 percent of the market, indicating high levels of uncompetitive and distorted markets (Murphy, 2006). This signals inefficiencies that can occur in both domestic markets as well as in global markets.

In cases where there is extreme corporate concentration on a global scale for internationally traded agricultural commodities, it is not clear that trade liberalization will reduce inefficiencies associated with high concentration ratios. In the global grain market, for example, the top four firms control over 70 percent of the world's grain trade (Murphy *et al.*, 2012, p.9). High levels of concentration also exist in other globally traded sectors, including markets for tropical commodities grown in developing countries where just a handful of transnational firms control well over the majority of the market (Fairtrade Foundation, 2013, p.26). Market power of this kind can give firms the ability to manipulate prices in ways that can result in inefficient outcomes (Gonzalez, 2011, p.771). Because developing countries are small players in global markets, agricultural trade liberalization may result in more access for global firms in domestic markets, but the impact of this greater access is uncertain for both local farmers and consumers. The agrifood sector has tended toward greater, rather than less concentration in the past 30 years, as corporate mergers and acquisitions have intensified from agrifood input firms to processing companies to commodity trading (ETC Group, 2008).

The highly financialized nature of global agricultural value chains also raises questions about the assumptions of trade theory regarding market competitiveness and capital mobility. Transnational financial investment has moved into the agricultural sector in large volumes since the food price crisis of 2007–08, and there has been widespread concern about the impact of speculative financial capital on agricultural commodity and land prices (Ghosh, 2010; Isakson, 2014). These concerns raise questions about the validity of assumptions regarding the role of prices in determining comparative advantages

and associated adjustment mechanisms. Given questions regarding capital mobility, competitive markets, and the impact of financialization on price mechanisms within global agricultural markets, it is unclear whether a "natural" comparative advantage is what actually drives investment and allocation decisions within countries.

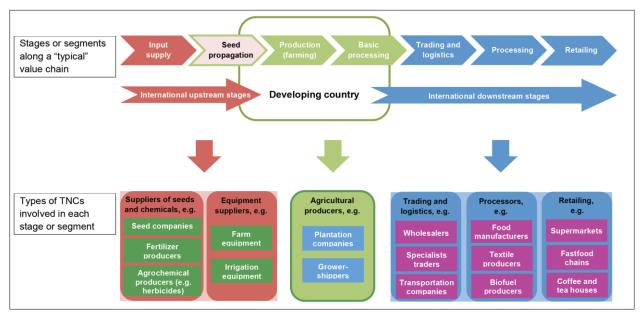


Figure 3: Typical agrifood value chain in developing countries

Source: Adapted from UNCTAD. 2009. World Investment Report 2009. Transnational corporations, agricultural production and development. © 2009. United Nations. Reprinted with the permission of the United Nations.

Factors of production within agricultural sector are inflexible

The unique nature of the agricultural sector also raises questions about assumptions relating to free mobility of factors of production between activities within a country. In order for specialization to occur according to comparative advantage, labour and capital must be able to easily switch from producing one good to producing another. Advocates of trade liberalization acknowledge that some costs are associated with switching activities in the process of specialization, but stress that winners can compensate losers or that government policy can assure such compensation. Critics argue that adjustment costs are significant and that compensation is not guaranteed. Further, adjustment costs are not just economic in terms of the cost of new capital in new industries, but also human, involving psychological and physical costs of the search for employment for those displaced from their previous activities. Opportunities for new employment may be limited, especially in developing countries where there tends to be a higher percentage of unskilled labour (see Chang and Grabel, 2004; Fletcher, 2010).

There is a high degree of inflexibility within the agricultural sector in particular, due to the complex interconnections between agricultural activity and the natural environment on which it is based. There is extended time required for growing seasons, for example. The agricultural sector also plays an important role in providing rural employment, which provides a vital safety net for farmers and their families, as other economic opportunities in rural areas are very limited. Any new employment opportunities may not lead to increased incomes, as farmers who were transitioned out of farming

activities are likely to find it difficult to secure employment in nonfarm activities or as agricultural labourers (Sachs *et al.*, 2007, p.30; Li, 2009; Fuchs and Hoffmann, 2013, p. 269).

Because of these inflexibilities, major shifts between activities within the food and agriculture sector, or between the agricultural sector and other sectors, are very difficult and challenging, especially in the short run (FAO, 2003; Chang, 2009). Compensation to losers from trade-related changes within the sector cannot be assumed in many of the world's poorest countries. Social safety nets such as food and nutrition assistance programmes in many developing countries are not well resourced (FAO, 2003; De Schutter, 2009). A recent World Bank report, for example, indicates that some 870 million of the world's poorest people – the majority of whom live in rural areas – are not covered by any social safety nets (World Bank, 2014b).

Externalities matter

Externalities are not typically considered within trade theory. For resources to be allocated efficiently, all costs must be incorporated into the prices of goods. This assumption has been widely criticized on more general terms because it does not take into account the potential externalized costs and benefits associated with economic activity (Daly, 1993; Fletcher, 2010; Prasch, 1996). Some analysts have sought to measure externalities with a view to developing policies that encourage benefits and correct for costs (Pretty *et al.*, 2001). Some economists, for example, have undertaken modelling exercises which show that if external environmental costs of agricultural production were incorporated into prices for globally traded food items, these costs would outweigh any potential gains from trade (Schmitz *et al.*, 2012). Schmitz *et al.* have calculated that trade liberalization in the period to 2045 will likely result in efficiency gains of around US\$9 trillion, but these gains are projected to be accompanied by an increase in carbon emissions of around 75 gigatonnes. This expected increase is largely due to land use change to accommodate comparative advantages, with the result that tropical forests, particularly in Latin America, are likely to be converted to production of agricultural crops for export (Schmitz *et al.*, 2012).

Other studies have stressed the importance of looking at specific foods, crops, and regions in analyzing food trade and its environmental impact, both positive and negative (MacDonald *et al.*, 2015; Hertel *et al.*, 2014). For some food commodities such as globally traded meat, as well as feed and ingredient crops like soy and palm oil, production geared for global markets can mean shifting into large-scale monoculture farming operations, which have been widely recognized to have enormous environmental costs ranging from increased greenhouse gas emissions to biodiversity loss, and water depletion (Foley, 2011; Garnett, 2013; Nepstad *et al.*, 2006). Such outcomes can lead to an uneven distribution of ecological effects of food production, with exporting countries bearing additional environmental costs (MacDonald *et al.*, 2015). In the case of soy and palm oil, for example, just five countries account for over 95 percent of exports and it is these countries that pay the highest environmental costs (MacDonald *et al.*, 2015, p. 283). These concerns apply less to crops grown by small-scale farmers that can be part of biodiverse farming systems, such as coffee and cocoa.

Other potential externalities associated with increased global food trade include public health considerations that arise from the growing trade in processed and packaged foods, the consumption of which is linked to rising levels of diet-related diseases (Friel *et al.*, 2015). Processed food commodities, including ultra-processed foods that are associated with a range of negative health impacts, make up a growing percentage of the food market and are increasingly traded globally (Rayner *et al.*, 2006; Hawkes *et al.*, 2012). The health costs associated with these types of foods are significant (Monteiro *et al.*, 2013).

The externalities associated with global food trade are important and worthy of further study. For example, the environmental impact of transportation, processing, packaging, and cold storage are often not taken into account in studies on the efficiency gains associated with trade. As Godfray *et al.* (2010, p. 813) note, "...the environmental costs of food production might increase with globalization, for example, because of increased greenhouse gas emissions associated with increased production and food transport ... There is an urgent need for a better understanding of the effects of globalization on the full food system and its externalities."

Dynamic considerations are left out of the picture

Specialization based on comparative advantage prioritizes short-term conditions and tends to overlook longer-term dynamic potential for growth within countries. Decisions to specialize based on short-term conditions can stunt long-term growth and development potential by locking countries into producing low value-added goods, such as raw commodities, making it difficult to capture value added from processing and manufacturing (Chang and Grabel, 2004, p. 61–63). These concerns apply to the agricultural sector and may lock countries into producing only at stages within global value chains (as illustrated in Figure 2 above) that are relatively low value-added and not particularly remunerative (Chang, 2009).

If the overall gains from trade are uncertain at the country level, and if potential gains are not distributed equally within society, there may be certain groups of individuals within countries who find themselves worse off in terms of food security than they were before trade liberalization (FAO, 2003). Some economists, such as Chang, argue that for countries with low levels of industrialization, a policy of food self-sufficiency is perfectly sensible, as specialization can be too risky and result in serious negative consequences arising from hunger and malnutrition (Chang, 2009, pp.6–7). Similarly, Morrison and Sarris caution that liberalization of the agricultural sector too early in a country's development can leave the agricultural sector weak, and impede, rather than improve, prospects for economic growth, poverty alleviation, and food security (Morrison and Sarris, 2007, p.14). These dynamic aspects of trade and development in the food sector would benefit from further study to help develop appropriate policy responses in countries facing different circumstances.

Efficiency gains overshadow other goals

The centrality of the efficiency gains argument within the "trade as an opportunity" narrative tends to prioritize the maximization of efficiency over other social goals. While efficiency is important in some contexts, other social goals, such as protecting the right to food, ensuring decent livelihoods, and building sustainability into food systems, deserve equal consideration. It may be possible to achieve these other goals while simultaneously pursuing efficiency gains, but this is not always the case and there are often trade-offs. Moreover, if efficiency gains are uncertain in the first place because other assumptions do not hold, as outlined above, it is not clear that trade should be prioritized as a primary policy for food security in all cases.

Some market inefficiencies can be important for ensuring food security and environmental sustainability. Certain short-term inefficiencies, such as government policies to direct investment in the agricultural sector, can lead to increases in long-term productivity (Chang, 2009, p.7). Ecological resilience in the agricultural sector can benefit from a degree of redundancy that may be seen as "inefficient" in economic terms, yet it is important for the protection of ecosystem services over the

long run (Fuchs and Hoffmann, 2013). Small-scale, ecologically diverse farming systems that may not be profitable in strict economic terms provide meaningful livelihoods and ensure the preservation of plant genetic diversity, providing enormous social benefits for a large segment of humanity and strengthening the resilience of food systems (Sachs *et al.*, 2007). And government organized food distribution and social protection programmes based on need, rather than market efficiency, are also important to ensure all members of society have access to an adequate and nutritious diet (Devereux *et al.*, 2012). Critics argue that trade policies that prioritize these other social goals should be seen as correcting for market failures, rather than being defined as market "distortions" (Nadal and Wise, 2004).

4. Trade as a threat to food security

Standing in opposition to the trade as opportunity perspective is another narrative that views trade as a threat to food security. The recent food crisis prompted increased attention to this viewpoint, as rising food prices at the international level had direct impacts food access in many countries that depend on food imports as a key source of their national food supply. Many countries, as noted above, sought to reduce their reliance on global food markets in the wake of the crisis.

The "trade as threat" narrative is not simply a mirror opposite of the "trade as opportunity" perspective. In addition to providing a critique, it also maps out an alternative vision for food security built on a fundamentally different way of organizing the food and agriculture sector, one that focuses on smallholder farmers, bio-diverse farming systems, and a radical reduction in the reliance on international trade for meeting food security needs. Whereas advocates of trade liberalization have seen trade as a way to increase food security through the free movement of food across borders to enhance availability, access, nutrition, and stability, the counter narrative prioritizes locally produced foods to meet these needs. Indeed, this alternative viewpoint has been critical of more recent interpretations of the concept of "food security" precisely because these definitions do not specify where food should come from, nor how that food should be produced, and this silence on these issues is assumed to mean that it advocates free trade and industrial food systems (see Patel, 2009; Fairbairn, 2010; Jarosz, 2011; Lee, 2013).

The advocates of the trade as threat narrative include some developing country governments, civil society organizations and social movements, as well as critical food studies academics. Some of these actors advocate a strong role for the state in establishing food policy at the national level, while others rally around the concept of food sovereignty at the community level and are sceptical of state authority. Still others see a role for hybrid models (Patel, 2009; Iles and Montenegro, 2015). Although a more eclectic group than the trade liberalization advocates, what unifies those adopting this counter-narrative in its broadest sense is their support for the idea that food should be treated as an exceptional case within trade policy and that food security policies should be socially just, ecologically sustainable and grounded in particular locations.

This viewpoint does not call for an end to all trade in food, but its advocates do argue that national and/or local food systems should be prioritized over food trade within the mainstream industrial food system. There are three common components to this narrative: 1) reference to political ideas of sovereignty and the right of states and communities to determine the shape of their own food systems and food security policies; 2) reference to the multiple functions associated with the agricultural sector that constitute public goods that the market on its own will fail to provide; and 3) reference to the risks

associated with liberalized trade in agriculture, particularly in the circumstance of uneven trade liberalization across different countries. These arguments are explored more fully below.

4.1 Sovereignty and the right to prioritize food security over trade

Earlier notions of food security prioritized national-level food supply as a key component of national security and this idea continues to resonate with many governments as part of their political strategy. As noted above, the idea persists that food self-sufficiency, or at least the capacity to be largely self-sufficient in food, remains at least nominally important for conceptions of national security. A number of developing countries take this viewpoint, as they do not wish to be vulnerable by relying on other countries for their food supply. But it is not just in developing countries where this viewpoint persists. George W. Bush's comments to the Young Farmers of America in 2001 illustrate this widely held political perception even among wealthy nations:

"It's important for our nation to build -- to grow foodstuffs, to feed our people. Can you imagine a country that was unable to grow enough food to feed the people? It would be a nation that would be subject to international pressure. It would be a nation at risk."

(Bush, 2001).

This deeply ingrained association between national security and the capacity to self-produce food at a national level was no doubt a strong force that kept food as an exceptional case in the international trade regime for much of the twentieth century. And many countries continue to press for the exceptional treatment of food in the international trade regime on these grounds, arguing that it is the nation's sovereign right to pursue policies that ensure the food security of their population as a first priority, before undertaking measures to enhance trade in the sector. This includes the right of countries to increase the percentage of food that they produce domestically which can provide an important contingency against supply disruptions and price volatility as well as provide social assistance for development in rural areas.

It is not just governments that have pressed for sovereign rights with respect to trade policy. The food sovereignty movement has also stressed the right to limit agricultural trade in order to protect broader social and food system goals. The food sovereignty movement emerged in the early 1990s, largely in response to the incorporation of agriculture into the international trade regime during the Uruguay round of the GATT negotiations, as noted above (Wittman *et al.*, 2010, p.2; Patel, 2009). Indeed, one of the key objectives of the movement has been to "get agriculture out of the WTO" (Via Campesina, 2003; Rosset, 2006). At its broadest level, food sovereignty calls for the right of nations and peoples to determine the contours of their own food systems, including the form of market relations, ecological dimensions, and cultural aspects (Wittman *et al.*, 2010). Although the food sovereignty movement explicitly positions itself as an alternative to neoliberal models of agriculture and trade, it does accept that some trade may need to take place where domestic production falls short of needs, and where food producing regions have surplus available for export. Its vision for how that trade should take place, however, remains largely undefined and its priority is to foster local food systems and local market exchange (see Burnett and Murphy, 2014).

Both the state-based and civil society-based approaches to sovereignty in food policy and practice are not explicitly calling for complete food self-sufficiency where a country closes its borders to all food trade. Rather, advocates of this approach seek the right of both states and communities to pursue their own self-defined food policy, including in relation to trade. This may include, for example, an increase in

the percentage of food a country produces domestically in relation to its consumption in order to reduce reliance imports for this vital resource. And it may involve the establishment of food policies that include some measures, such as guaranteed purchase prices and public stockholding arrangements, which others may deem to be trade distorting. But these policies are defended by advocates of this viewpoint as being within the sovereign right of states and communities to prioritize food security over commercial concerns, including upholding and prioritizing the right to food and the environmental sustainability of food systems, especially when these policies are the most affordable means available to support food security.

4.2 Multifunctionality of agriculture

A second common rationale for treating food and agriculture as an exception in international trade rules is that the sector serves multiple functions in society beyond the production of tradable commodities. Agriculture provides both direct and indirect benefits to society, including food security, ecological services, livelihoods, bucolic rural landscapes, and identity and cultural heritage (Figure 4). As Sachs *et al.* have put it, agriculture is "not a normal business and at the same time, it is much more than a business" (Sachs *et al.*, 2007, p.31). Advocates of this viewpoint stress that these functions, which are inseparable from agriculture, are "public goods." As is the case with many other public goods, if left to its own devices, the market will fail to produce these other benefits associated with agriculture (Sakuyama, 2005; Potter and Tilzey, 2007; Moon, 2011). This view sees a role for strong state policies to correct for these market failures (Moon, 2010).

A number of governments have highlighted the multiple functions of agriculture in trade negotiations, although with different emphasis. The European Union, for example, has strongly advocated recognition of the multifunctionality of agriculture, with a focus in particular on its role in preserving rural landscapes, in culture and identity, and as a provider of ecological services. On these grounds, it has made the case that agriculture should continue to have a special place when it comes to trade policies (Potter and Tilzey, 2007). Other industrialized countries, including Japan and the Republic of Korea, have also played up the multifunctional aspect of agriculture (Moon, 2010). At the same time, many developing countries have stressed the importance of food security and rural livelihood functions of agriculture, although differently labelled within WTO trade talks as "non-trade concerns" (NTCs) (Sakuyama, 2005; Blandford *et al.*, 2003). The Doha Declaration recognized the unique role agriculture plays in society by stressing that NTCs, including food security, the environmental functions of agriculture, and agriculture's role in rural development, must be taken into account (IISD, 2003; WTO, 2001).

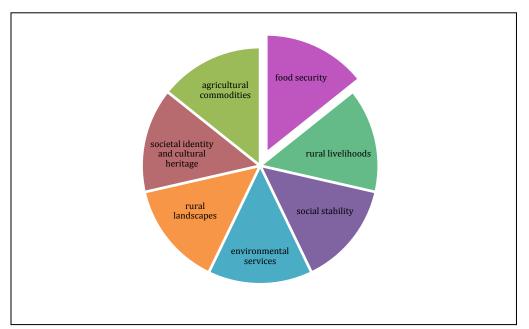


Figure 4: Some examples of the multiple functions of agriculture

Source: based on FAO, 2007; Sakuyama, 2005; Potter and Tilzey, 2007.

The food sovereignty movement has also emphasized the multiple roles of agriculture as a rationale for limiting trade in food and for promoting the needs of small-scale farmers (McMichael and Schneider, 2011). The movement has put emphasis in particular on agriculture's ecological functions, its role in providing rural livelihoods and alleviating poverty, and its cultural significance (Holt-Giménez and Altieri, 2013). They point to a growing body of scientific evidence that shows that small-scale agroecological farming methods are associated with environmental sustainability benefits such as carbon absorption and thus are seen as "climate cooling" (Altieri, 2002; Martinez-Alier *et al.*, 2011). There is also growing evidence of the high productivity of small-scale ecological agriculture (Pretty *et al.*, 2006; Via Campesina, 2010; Koohafkan *et al.*, 2012).

4.3 Liberalized food trade brings risks

A third common argument put forward by those who see trade as a threat to food security is that liberalized trade in food and agricultural items brings unacceptable risks, for both peasant producers as well as consumers (summarized in Box 2), which can undermine food security and the right to food. This line of argumentation picks up on many of the limitations in the trade as opportunity narrative discussed above. Those who see trade as a threat point out the many ways in which trade liberalization opens doors for transnational corporations and financial investors to increase their profits at the expense of small-scale farmers. They argue that more liberal trade and investment policies enable these investors to gain easier access to both land and labour in developing countries, which are then brought into the service of globalized agrifood value chains. While supporters of the trade as opportunity narrative see potential benefits in linking smallholders to global value chains (e.g. Maertens *et al.*, 2012) those from this more sceptical viewpoint tend to focus on the costs associated with those relationships (McMichael, 2013).

Advocates of the trade as threat narrative argue that liberalized trade in food and agriculture opens opportunities for large transnational agribusiness companies to source food items from anywhere around the globe in ways that give them enormous advantages over smaller, local firms, thus crowding out competition and increasing corporate concentration (Murphy, 2006; Murphy *et al.*, 2012). As noted above, many tropical agricultural products, including fruits, beverages, and ingredients, are highly concentrated with just a handful of transnational firms controlling an enormous percentage of the global marketplace (Fairtrade Foundation, 2013).

The global expansion of agricultural value chains under a liberalized agricultural trade regime also has enormous implications for farmer autonomy. Small-scale farmers serving these global value chains often lose control over their own decision-making about what crops they grow, with what inputs, into what channels they sell their crops, and at what price (Fuchs *et al.*, 2009; McMichael, 2013). These farmers often become highly indebted in an attempt to meet the demands of the major firms that contract them to grow products for them (Fulponi 2007), while at the same time facing a high risk that their crops will be rejected if they do not meet certain technical and product standards (Singh, 2002; Masakure and Henson, 2005; Kirsten and Sartorius, 2002).

Liberalized agricultural trade and the organization of agriculture into highly financialized agricultural value chains is also seen by critics to facilitate the acquisition of large-scale tracts of land by financial and transnational corporation (TNC) investors (Fairbairn, 2014; Isakson, 2014). Large-scale land acquisitions have expanded rapidly since the 2007–08 food crisis, and have been associated with the loss of land rights for peasant producers and with ecological implications related to the industrial agricultural models of production that are often promoted on acquired lands (Deininger *et al.*, 2010; White *et al.*, 2012; Cotula, 2012). There are also wider ecological costs that those from this narrative associate with trade liberalization, including reduced genetic diversity associated with specialization of production for export, and carbon emissions associated with long-distance food transportation, storage and distribution (Schmitz *et al.*, 2012).

There is also growing concern from supporters of this narrative regarding the health risks associated with the growing dominance of Big Food companies that are associated with global agrifood value chains. These supply, processing, and retail networks have served as conduits for a global "diet transition" that is characterized by the rising consumption of processed and packaged foods, which are in turn associated with the rise in diet-related chronic diseases such as diabetes and heart disease (Rayner *et al.*, 2006; Hawkes *et al.*, 2012; Friel *et al.*, 2015). The North American Free Trade Agreement (NAFTA), for example, has been linked with an increase in exports of maize, soy, sugar, snacks, and meat products from the United States of America to Mexico over the period from 1994–2008. The increased prevalence of these products in the Mexican food system has in turn been implicated in the increased rates of obesity in the country (Clark *et al.*, 2012).

Box 2: Some of the risks associated with the liberalization of agricultural trade and investment

- Loss of autonomy over decision-making and livelihoods for smallholders
- Increased corporate concentration and dominance of global value chains
- Loss of land rights as agricultural land is acquired by foreign and large-scale investors
- Ecological costs such as loss of genetic diversity and increased carbon emissions
- Elevated health risks from growing trade in, and consumption of, processed and packaged foods

Source: author.

Given these concerns about the risks associated with trade liberalization, many of those subscribing to the trade as threat narrative, particularly developing country governments, support a strong role for the state. This role includes a right to regulate and enact policies that limit the power of agrifood TNCs while protecting the livelihoods, health, environmental sustainability and food security of small-scale producers, particularly in developing countries. Food Sovereignty advocates, although they are somewhat sceptical of the state's role in agricultural policy more generally, stress the importance of policy support for small-scale ecologically based peasant production. They point out that peasants currently produce some 70 percent of the world's food supply while utilizing only 30 percent of the resources allocated to the sector. This compares with the industrial food chain, which they argue receives 70 percent of the resources, while only providing 30 percent of the world's food (ETC Group 2009). Shifting the balance of support toward peasant producers, they argue, is key to ensuring sustainability and equity in food systems.

4.4 Potential limitations and inconsistencies within the "trade as threat" narrative

The trade as threat narrative has wide appeal among many governments and agrarian social movements because it plays on notions of sovereign choice (of states or of rural communities) and promises an ecologically sustainable food future that is more equitable and productive than the current system. Like the trade as opportunity narrative, the arguments of those who see trade as a limiting factor rest on certain assumptions. These assumptions, when examined closely, reveal some internal inconsistencies in the argumentation and raise a number of questions that could benefit from further research. Some of these limitations and inconsistencies reflect the arguments made by advocates of the trade as opportunity narrative as discussed above, and in order to limit repetition, the discussion on those points will be kept brief.

As outlined above, the trade as threat narrative includes distinct sub-narratives. On one hand, the sub-narrative of food sovereignty focuses on community sovereignty. On the other hand, there is another sub-narrative that focuses on the state's right to policy space. As such, some of the issues noted below may apply to one of these sub-narratives more than the other, although the analyses often overlap and complement one another.

Greater food self-sufficiency may not be a feasible goal for all countries

Advocates of the trade as threat narrative are often careful to note that they are not arguing for complete self-sufficiency in food for all countries, but working toward this goal is often implied within the narrative (in particular among advocates of food sovereignty) and some are explicit that it is a goal. Although the idea of self-sufficiency (or at least reducing reliance on food imports to the extent possible) is politically attractive to many governments and communities, this may not be a feasible or practical goal for many countries. It is important to note, however, that there are different conceptions of food self-sufficiency. These range from an extreme form where a country closes its borders completely, to the goal of increasing a country's domestic food production capacity as a percentage of its consumption.

Some countries, as outlined above, must rely on trade for their food security because they lack the capacity to produce sufficient quantities of their own food due to climatic conditions, soil quality, water constraints, availability of farmland, etc. In such cases, it may be preferable to specialize at least some production where resource endowments are better suited to certain crops. According to one study,

some 66 countries are currently incapable of being self-sufficient in food (see Fader *et al.*, 2013). City states such as Singapore, as well as many small island economies, for example, do not have adequate farmland to support their populations, while a number of sub-Saharan African countries are projected to be negatively impacted by climate change, and will likely find it difficult to produce all of their own food supplies (Agarwal, 2014). Indeed, many countries are already dependent on food imports in part for this reason (although there is a complex set of reasons for rising rates of dependence on food imports) (Rakotoarisoa *et al.*, 2011). Countries that are closed to all or most trade may put themselves at greater risk of domestic supply shocks that arise from weather variability and other unforeseen events. Many trade advocates argue that supply shocks and price volatility occur more frequently, and often more severely within domestic markets than is the case on international markets (Zorya *et al.*, 2015).

Going forward, it may become less relevant to think of food supply in terms of political boundaries more generally, as the food trade picture is highly complex. One recent study estimates that already some 16 percent of the world's population relies on international trade to meet their food needs, and projects that the number of people who will need to rely on imported food could rise to 51 percent of the world's population by 2050 (Fader *et al.*, 2013). While some analysts argue that this growing dependence on imports is largely a result of uneven trade policies (e.g. Rosset, 2006), others point to a complex mix of reasons, including not just trade practices but also climate change and resource constraints (Rakotoarisoa *et al.*, 2011). As noted earlier, the trade as opportunity narrative emphasizes this point, arguing that trade can help to improve efficiencies by encouraging production of certain foods where conditions are best suited. The food sovereignty position does not deny that some trade might be warranted. The main point of difference here is the extent to which trade liberalization (versus trade only under certain conditions) is required to address these concerns (Burnett and Murphy, 2014).

Extra-territorial impacts of protection can harm the food security of others

Many countries seek to promote food security and rural livelihoods with domestic policies that others deem to be trade-distorting. Although the trade as threat narrative seeks to justify policies that may require intervention in markets on the grounds of sovereignty at the level of the state or community, such measures can in some cases have extra-territorial impacts that can harm the food security of other countries. As noted earlier, the imposition of export bans may be attractive as a means to reduce domestic food prices, but they can also have negative impacts on other countries (Sharma, 2011; Headey, 2011). While most countries would not want to actively inflict harm on the food security of other countries, poorer countries often lack the tools and resources to pursue domestic food security policies that are completely trade neutral. At the same time, there is a risk associated with this narrative as states may use sovereignty arguments to justify food security policies that may also serve as a form of trade protection. While this is a concern, there is need for further study on whether this is the case in practice.

A free reign for trade-restricting and/or trade-distorting policies is unlikely to rectify inequalities in the global economy, and may exacerbate them. Most food sovereignty advocates, as noted above, recommend taking agriculture out of the WTO. But doing so could result in an even more uneven playing field than is currently the case. Rich industrialized countries could conceivably return to their past highly distorting trade practices such as dumping below the cost of production, practices which would cause serious problems for the world's poorest countries (Murphy *et al.*, 2005). Although some protection may be warranted on multifunctional grounds to correct for market failures, as noted above, the lack of internationally agreed norms for such practices could lead to widespread and intentional

intervention in markets that can cause extraterritorial impacts with negative implications for food security in the world's poorest countries.

Farmers' right to choose

The food sovereignty agenda is largely based on an assumption that all farmers wish to produce food crops on small farms and to distribute them through local markets. Yet farmers' interests, including small-scale farmers' interests, vary widely and they engage in a range of activities (Murphy, 2012). Despite some issues, such as exclusion based on product standards required by major suppliers, farmers may still choose to produce cash and export crops and market them into global agrifood value chains (Burnett and Murphy, 2014; Li, 2015). A key reason for seeking out cash and export crop production in spite of these constraints is that farmers may still derive a higher income from engaging in these supply chains than they would outside of them, even as contract farmers or as labourers on plantations (Singh, 2002; Swinnen and Vandeplas, 2012).

Farmers may also seek to mitigate risks by diversifying their production to include some trade crops and some self-production of food crops (Isakson, 2009). And some farmers may leave farming altogether if given the choice. Given the large numbers of small-scale farmers in the developing world engaged in producing globally traded commodities, such as cocoa, coffee, tea, sugar, fruits, and vegetables, it is important to recognize their right to choose if and how they wish to farm (Agarwal, 2014).

Challenges of ensuring small-scale production produces sufficient food for all

The assumption made by food sovereignty advocates that small-scale farms can produce enough food to provide adequate nourishment for everyone on the planet is an attractive idea, but as some critics point out, this claim could benefit from further empirical investigation (Bernstein, 2014). Already, small farms do produce a significant amount of the food consumed globally, but precise data are sparse. Some analysts have raised questions about whether small-scale production channelled via local markets can meet the world's food needs in future with a growing world population. A number of studies show that productivity in terms of yields per unit of land on small-scale farms is in fact high which indicates that there is potential for small-scale agroecological farms to produce sufficient food for all (e.g. Pretty *et al.*, 2006; Badgley *et al.*, 2007). But at the same time, farms in poor countries tend to have lower yields per hectare than in richer countries (FAO, 2014). Whether yields for specific crops matter more than production potential is an important question that requires further research.

Most analysts, on both sides of the debate, agree that small farms are important for ensuring future food security, and that there is potential to improve the productivity of small-scale farming in an ecologically sound way. There remains considerable debate, however, over whether more land will need to be cultivated in order to maintain or increase global food production to meet the food needs of a growing world population under a small-scale agroecological farming model (Smith, 2013; Hertel *et al.*, 2014). With limits on the amount of arable farmland available for crop production, and the threat of ecological damage from forest clearing for farmland, some have promoted the idea of "sustainable intensification" as a possible middle path that could increase yields on existing agricultural land (Foley *et al.*, 2011; Garnett *et al.*, 2013). Others are sceptical of the concept, which they see as falling short on sustainability criteria, including justice, and for prioritizing production over other important dimensions of food security, such as access and nutrition (Loos *et al.*, 2014). Much more study is needed on this important and controversial issue (Godfray, 2015).

Distributional questions

Much of the focus of the food sovereignty model is on agricultural producers' rights and the ecological benefits of agroecological farming methods. At the same time, some scholars have pointed out that there is relatively little detailed analysis on access to food under food sovereignty, in particular a clear model of precisely how locally grown small-scale food production will be linked up with consumers in increasingly large urban areas, especially if the main focus of production is self-provisioning (Bernstein, 2014). Given that urban populations are set to rise in the coming decades and currently constitute well over half of the world's population, this is an important question that is only beginning to see further research, including from a food sovereignty perspective (Crush and Frayne, 2011; Marsden, 2013; Blay-Palmer *et al.*, 2015; McMichael ,2015). The food sovereignty movement's focus on collective rights at the community level, while important, may also divert attention from maldistribution and inequity within households and communities, where women are often trapped in unpaid activities with insecure land tenure and other rights (Agarwal, 2014). These distributional issues are important and deserve further consideration.

5. Bridging the divide?

Is it possible that tensions between these two opposing narratives on food security and trade can be diminished? Can both contribute in meaningful ways to the formulation of international trade policy with respect to food and agriculture? These narratives, although they appear at first glance to be polar opposites, do share some elements of common ground, and it is from this vantage point that productive policy dialogue can potentially be fostered. Both narratives stress the importance of self-reliance, although each camp defines "self-reliance" differently. For those advocating trade liberalization, self-reliance means utilizing the means available to the state, including trade where it is more cost effective, to ensure food security (FAO, 2003). For those who see trade as a potential threat to food security, self-reliance means relying on self-production first and then adding trade if required, and only under certain conditions (Via Campesina, 2003). The fault lines between the two are with respect to the degree to which they advocate reliance on trade, and the extent to which states' domestic food policies should or should not include measures that might restrict trade.

5.1 Polarizing tendencies

If there is potentially room for common ground, why has this debate been so polarized to date? There are a several key reasons for the tense nature of the debate and unpacking these features of the two narratives may help to begin to clear the ground for more productive dialogue.

First, the two narratives come out of different ideological traditions and are advocated by those trained in different scholarly disciplines. As a result, each perspective brings its own language and unit of analysis, which makes seeing the potential for common ground difficult. Those advocating trade liberalization, for example, tend to come from an economic tradition and focus analysis around the potential benefits of market allocation to meet social goals. These participants in the debate typically focus on markets as a primary unit of analysis and bring a language of incentives, efficiency gains, economic growth, income, sustainable development, and the economic rights of individuals. The advocates of sovereignty in food policy and practice tend to come from other scholarly disciplines that prioritize other means for meeting social goals, including state-managed markets for some, and local community forms of organization for others. These alternative perspectives typically focus on the

productive capacity of agricultural communities (at the national or community level) as a key unit of analysis and bring a language of self-sufficiency (or at least a prioritization of self-production), sovereignty, livelihoods, environmental and social justice, agroecology, and collective rights.

Both narratives rely on scientific evidence to back their case, but they bring different understandings of the kinds of methods, data, and indicators that they view as scientific and legitimate. Advocates of trade liberalization typically rely on empirical evaluation of the impacts of trade on food security using quantitative data at national and global scales. The relevant measures from this viewpoint include, for example, the capacity of countries to import food from abroad as a ratio of the cost of their food imports to the value of their overall merchandise exports, which shows whether reliance on food imports is economically feasible. Crop yields and labour productivity are also viewed as relevant measures of efficiency in the agricultural sector. Using measures such as these, this perspective attempts to evaluate benefits of trade liberalization by quantifying the efficiency gains and food access that they see as essential for food security.

Those who see trade as a potential threat to food security tend to rely on certain types of quantitative data as well as qualitative case study data in support of their viewpoint. In terms of relevant quantitative data, advocates of this perspective focus on a country's self-sufficiency ratio (the percentage of food consumption that is produced domestically) and food import dependency (the percentage of food consumption that is imported) as measures of the health of the agricultural economy. They also refer to overall farm productivity per unit of land and the percentage of the population who gain their livelihoods from agriculture, rather than focusing on yields by crop or by labour units when discussing the productive capacity of agriculture. This perspective also draws heavily on qualitative case studies of lived experience based on interviews and observation to understand a range of impacts – from livelihood to culture, and ecological services – associated with trade liberalization and in comparison with instances of localization of production, as well as models of what is possible. In using these measures, this perspective seeks to evaluate the productive capacity and sustainability of local communities, which they see as a vital foundation for food security.

Finally, both sides tend to simplify the opposing viewpoint when contrasting it with their own. The other side of the debate is often portrayed in its extreme forms and then shown to be impractical and unworkable compared to the more nuanced version being advocated. For example, those who see trade as an opportunity tend to portray the other perspective as based on a pure form of self-sufficiency that involves highly protective trade measures. By contrast, those who see trade as a threat often portray the other viewpoint as advocating pure free trade in agriculture based on large-scale industrial farming methods. In both instances, the opposite extreme is dismissed as being problematic for a variety of reasons. The result is often an "either/or" approach taken by both sides of the debates, which can stifle constructive policy dialogue.

The rhetorical strategies adopted by each side of this debate have mirrored Albert Hirschman's (1991) characterization of the nature of polarizing rhetoric in public policy debates. According to Hirschman, arguments put forward in such debates tend to fall into one or more of three categories that are typical when advocates of one perspective on a public policy issue seek to discredit the other side. These are: futility – making the case that the other policy leaves the structures largely intact and goals are not met; perversity – making the case that the other policy will have counterproductive outcomes and achieve the opposite outcome from what is desired; and jeopardy – making the case that the other policy will result in unacceptable costs that jeopardize past gains. These types of rhetorical arguments are often

used in combination with each other in a bid to discredit the other side in political debates, even in cases where the arguments are potentially contradictory.

Both the "trade as opportunity" and "trade as a threat" perspectives engage in these types of rhetorical arguments about the policies promoted by the other, as the above analysis shows. The trade as opportunity narrative, for example, portrays self-sufficiency as perverse, resulting in counterproductive outcomes that jeopardize gains made in reducing hunger over the past 50 years. The trade as threat narrative, likewise, sees only jeopardy in trade liberalization, which imposes unacceptable costs that will result in more hunger for poor and marginalized populations, not less. Both perspectives see the policies of the other as futile, stuck in past structures that do not bring sufficient change to achieve the goal of food security. As Hirschman notes, these argumentative devices have the effect of polarizing debates and shutting down meaningful dialogue between different viewpoints on important public policy issues because they foster a "talking past each other" atmosphere (Hirschman, 1991).

5.2 Is there a way to get past binary approaches to trade and food security?

Just because one perspective seeks to improve efficiency via market allocation does not mean that it does not value small-scale ecological farming. And just because another perspective seeks to improve a community's or state's productive capacity of agriculture in ways that embed food security, social and ecological concerns does not mean that it rejects all international trade. It is important to step back from the heated rhetoric that often takes over in these debates and weigh the costs and benefits of both sides, through multiple methodological and disciplinary lenses, when examining the relationship between trade and food security. For example, taking the four pillars of food security (availability, access, utilization, and stability), and examining in what ways trade either enhances or detracts from food security in each one, can be a useful exercise in building understanding across the divide (see Figure 5, for example). Some recent work has already begun to take on this task (see Brooks and Matthews, 2014; FAO, 2015).

Focus on more open-ended questions

Shifting the policy debate to focus on questions that are more open-ended in nature, with the priority placed on food security, may help to steer the dialogue in ways that are more productive and highlight areas of agreement rather than disagreement. Asking whether trade is 'good' or 'bad' for food security begs an answer that is either positive or negative. But asking 'under what conditions is trade potentially supportive of food security?' would likely yield more nuanced answers from those on both sides of the debate. Neither side of the debate dismisses trade altogether, and both sides do see that in some circumstances trade may need to be managed carefully to ensure positive outcomes for food security. Putting food security at the centre of the analysis, and considering the role of trade alongside other food security policies, could help to bring both sides to the table to set out initial steps toward agreed parameters for policy.

Figure 5: Evaluating benefits and costs of trade for the four pillars of food security

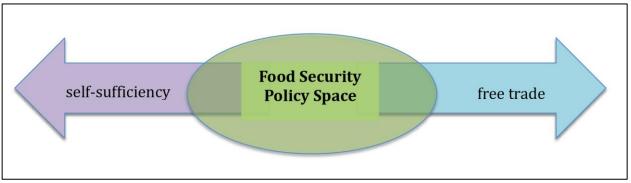
Dimension of food security	Potential opportunity	Potential threat
Availability	 Specialization and associated efficiency gains can lead to increased production of food on a global scale Imports can increase domestic supply of food 	 No guarantee of greater food availability in all countries (potential gains may concentrate) Availability of locally produced foods may decline if countries specialize in non-food agricultural exports
Access	 Increased production on a global scale may result in lower food prices and increased access Income/growth (from exports, specialization) can contribute to improved food access 	 Unequal distribution of gains within a country due to corporate control of supply chains, unequal land holdings Some producers may lose income and/or be transitioned out of agriculture with no viable alternatives
Utilization	 Imports have the potential to enhance dietary diversity in ways that have nutritional benefits 	 Imports of processed foods / specialization of production can harm nutrition (obesity risk; narrow nutrient profile of diets)
Stability	 Food imports can smooth domestic shortfalls due to seasonal weather variability and other factors Trade can smooth price variability within countries by stabilizing supply 	 Specialization can lead to environmental externalities that can cause future instability Reliance on food imports can increase risk of supply and access disruptions caused by global production fluctuations and price volatility

Source: author

Develop joint language

Language that is jointly developed through constructive dialogue may help to get past binary approaches and encourage more collaborative problem solving. New labels for key concepts could perhaps be developed to convey ideas where viewpoints overlap. For example, as neither side of the debate advocates the complete extreme of 100 percent free trade or 100 percent self-sufficiency as a policy prescription for any country, a continuum may be a more constructive way to think about policy space on trade and food security (See Figure 6). This type of approach may help to get past the either/or type distinctions that stifle meaningful dialogue. Indeed, there are established norms within the WTO regarding non-trade concerns on one hand, and special and differential treatment on the other. Creating policy space that enables countries to undertake policies that fall within these norms under the trade regime could help to create opportunity to address the unique concerns of each country. Both sides of the debate, however, must be willing to engage in consideration of how these norms might be operationalized in international trade rules.

Figure 6: Range of legitimate policy actions in the continuum between extremes



Source: author

Explore new indicators

It may be worthwhile to propose the creation of new, objective scientific indicators in consultation with advocates from both sides of the debate. One example might be a composite indicator along the lines of a "food balance index" that incorporates a measure of self-production and import reliance in combination with a measure of the significance of agricultural exports to the economy and overall export revenues that can be used to pay for imports. Such an indicator, utilized in conjunction with individual indicators measuring specific aspects of a country's food security and trade situation, might then be able to balance the concerns from the different perspectives. Choosing neutral language, and incorporating indicators seen as important by both sides of the debate into a composite index, might prove to be a productive exercise in determining what measures are legitimate in defining trade policy space for food security. The FAO has already begun to regularly publish a suite of food security indicators, and could supplement these with regular updates to additional measures such as the selfsufficiency ratio.

Use global governance forums to strengthen areas of convergence

Both sides of the debate would likely agree that all countries face unique circumstances and may require different sets of rules depending on their circumstances (Morrissey, 2007). For example, hunger is more severe in some countries than in others, and certain policy tools may be more available to some countries than to others. Wealthier governments, for example, can make use of subsidies in ways that can be defined as non-trade distorting, while less well-resourced governments that do not have the capacity to provide subsidies may need to rely on trade measures to a greater extent. For these reasons, unique rather than generalized approaches in policy contexts may be required. Indeed, this is one of the ideas behind the concept of "policy space" at the WTO. Both sides would also likely agree that it is important to guard against extra-territorial impacts of one country's actions on other countries. And both sides are likely to agree that trade rules matter.

On the latter point, developing country governments have been frustrated in the WTO context in recent years, where food security has become a flash-point, as power and interests tend to drive outcomes and do not typically include a spirit of compromise on these points. Civil society groups advocating a food sovereignty perspective have been reluctant to engage in WTO processes up to this point in part due to

² See http://www.fao.org/economic/ess/ess-fs/ess-fadata/en/.

these dynamics, and prefer to work via the Committee on World Food Security (CFS), housed at the FAO. The fragmented nature of global governance on issues at the intersection of food security and trade has tended to reinforce these divisions in the policy context. At the same time, fragmentation in global governance arenas can also foster synergies for creative dialogue and innovations in governance approaches (see Biermann *et al.*, 2009).

The development of new language and openness to new forums for dialogue that bridge these institutional divisions may help to ease tensions in policy debates on trade and food security. Allowing more open discussion of trade policy at the CFS, for example, may encourage civil society to engage more fully in policy discussions in ways that can establish areas of common ground for moving the debate forward in more productive ways.

There may be scope, for example, to pursue a globally agreed set of guidelines on the appropriate conditions under which international trade can support food security, similar to those on responsible agricultural investment and land tenure that were shepherded by the CFS in recent years. Guidelines of this type are typically voluntary and set out broad principles, rather than serve as hard governance rules. But at the same time, the process of establishing principles and guidance documents is very important in that it can serve as a mechanism for fostering dialogue among groups of stakeholders that do not typically work together, which can assist in finding common ground. Moreover, soft law guidelines can serve as a basis, or starting point, for hard law agreements in the future that carry more legal weight. Engaging in such a process with respect to defining principles for trade that is supportive of food security could potentially encourage more productive dialogue on the topic, outside of the halls of the WTO where members actively pursue their own government's interests. Such a process could, if governments and other stakeholders take the exercise seriously, help to eventually break the log-jam in the formulation of the WTO rules on agriculture and how it approaches the relationship of food security to trade.

Similarly, it is important that WTO members follow through with their already agreed aim to create explicit policy space for food security. The 2001 Doha Declaration clearly states that non-trade concerns, including food security and the environment, must be taken into account in establishing trade rules. Opening policy space for food security measures in trade rules, in a way best suited to the needs and capacities of the poorest countries, is thus an already agreed upon principle for the Round. Any attempt to drop these aims from the Round, primarily because they remain controversial, should be resisted by members, as abandoning them risks only further polarizing the policy debates.

Mapping out legitimate policy space for governance initiatives at the intersection of trade and food security in both the CFS and the WTO could help to establish a more equal weighting between efficiency goals and other social goals.

6. Conclusion

The global trade in food is an economic activity, but it is also an activity deeply tied to food security, rural livelihoods, culture, ecology, and politics. As such, evaluation of the interface between trade and food security must take a range of issues and methods of analysis into account. To date, most analyses of the topic have tended to approach the topic selectively. As this paper has shown, different modes of analysis on this question have resulted in opposing narratives that are highly polarized, leading in many cases to stalled policy development in this area. Each narrative draws from different normative ideas

about both food security as a concept, and about the appropriate role for trade in agriculture. And each view originates in different scholarly traditions that focus on different aspects of the issue. The advocates of each narrative have legitimate reasons to draw on the ideas and understandings that they do, and each tradition and the ideas that anchor them have deep historical roots.

Each of the narratives makes valid points that need to be taken into account in formulating policy on trade and food security. But each also has limitations that raise important questions and demand further evaluation. Because each narrative draws on different scholarly and ideological traditions, and draws on different types of scientific data, finding common ground between these narratives has been difficult in practice. In the WTO policy arena, these debates have become even more heated because power and interests have infused the negotiation process. Although finding common ground may seem hopeless in such a context, some measures may help to encourage first steps in finding a productive way forward that bridges the divide. This paper has suggested that initiating dialogue on more open-ended questions, formulating new, jointly-developed language to identify and strengthen the areas of convergence, along with developing new indicators that draw on the types of data that both sides of the debate utilize, as well as more creative governance efforts may help to move the conversation forward in a more productive manner.

An important starting point is that both sides of this debate recognize that the world is globally integrated and that ending all trade is not a likely or desirable outcome for policy. Although they differ in their views on the extent to which trade should play a role in providing food security, both sides agree that the trade that does occur should do so under certain conditions. How these conditions are negotiated in the context of trade policy and the global trade rules-structure is an important task that is ongoing within the context of the WTO and in domestic trade policies around the world. And how those rules fit into global governance frameworks that address food security is being discussed in the context of the CFS and other food security organizations, such as the FAO.

There are many possibilities for productive conversations around potential convergence points between the narratives. Some particularly urgent examples are:

- Recognition that agriculture serves various roles in society and the need to balance those goals with
 efficiency considerations in trade policy. The WTO's recognition of the significance of non-trade
 concerns, and special and differential treatment were important points signalling a shift in norms
 around these issues within the trade regime. The task now is to ensure that these ideas are taken
 seriously and not made hostage to power politics.
- Greater attention to the environmental sustainability implications of international trade policy and practice. As world food demand increases, and as climate change affects food systems, it is vital to ensure that food security needs are met sustainably. Failure to do so will harm not only the natural resource base on which food production draws, but also food security itself will be compromised. Environment is listed by the WTO as an important non-trade concern, but more attention needs to be paid to the broader environmental implications of trade policy, in particular what kinds of agricultural methods are promoted by different kinds of trade models.
- Greater consideration to diet and its relationship to trade policy. Food quality and nutritional issues
 are extremely important, and deserve more attention in the way trade policy is formulated. As rates
 of diet-related chronic diseases increase, it is important to consider the health implications of the

growing trade in processed and packaged foods and the ways in which trade policy can potentially reduce these risks.

- Strike a balance between the needs of rural producers and urban consumers within trade policy. It is especially important to consider the needs of developing countries that have a significant proportion of their populations engaged in agricultural production, at the same time that urban consumers' needs are taken into account.
- Ensuring the trade policy of one country does not cause harm to the food security of other
 countries, while balancing the ability of countries to pursue longer-term strategic goals for
 agricultural sector development and food security. It is important that developing countries are not
 be locked into certain types of agricultural production or prevented from pursuing domestic food
 security policies that are unique to their own situation. But at the same time, it is important to
 ensure that the food security of other countries is not harmed by those policies.

These are just a few of the areas where more productive dialogue needs to take place within trade policy formulation around food security. The different narratives outlined in this paper will have different positions on these specific issues, but there are potential areas for convergence in each of these examples that could be starting points for building mutual norms in the context of a global framework or set of guidelines on the appropriate role for trade in support of food security. How these questions are resolved in trade policy will depend not just on the expression of ideas, but also on the exercise of power and the influence of different interests. At the same time, however, it is important to remember that history shows that norms around both food security and trade can and do change. Fostering more productive dialogue through innovative governance processes could help to forge new policy approaches to this pressing and divisive issue.

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